

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1. (Canceled)

Claim 2. (Previously Presented) The dewaxing additive according to Claim 11, wherein the proportion by weight of the monomer A in the total weight of the copolymer is 0.1-70%.

Claim 3. (Previously Presented) The dewaxing additive according to Claim 11, wherein at least 50% of the monomers B contain alkyl radicals R⁸ of chain length greater than or equal to C₁₆.

Claim 4. (Previously Presented) The dewaxing additive according to Claim 11, wherein the monomers of formula A consist of one or more monomers selected from the group consisting of styrene, butyl methacrylate, methyl methacrylate, 2-ethylhexyl methacrylate and mixtures thereof.

Claim 5. (Previously Presented) The dewaxing additive according to Claim 11, further comprising one or more homo- or copolymers which are polyalkyl methacrylates and have alkyl substituents of chain length C₁-C₂₄.

Claim 6. (Previously Presented) The dewaxing additive according to Claim 5, wherein the homo- or copolymers which are polyalkyl methacrylates have alkyl substituents of chain length C₁₂-C₁₈.

Claim 7. (Previously Presented) The dewaxing additive according to Claim 5, wherein a ratio of the copolymers and the homo- or copolymers which are polyalkyl methacrylates is 1:20 to 20:1.

Claim 8. (Previously Presented) The dewaxing additive according to Claim 5, wherein the homo- or copolymer is a polyalkyl methacrylate which contains up to 20% by weight of C₁-C₁₀ methacrylates.

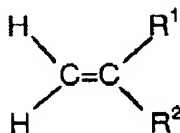
Claim 9. (Canceled)

Claim 10. (Canceled)

Claim 11. (Previously Presented) A dewaxing additive, comprising:

(i) in polymerized form, the following free-radically polymerizable monomers of Formulae A and B:

Formula A:



wherein

R¹ = H or CH₃,

R² = phenyl, benzyl, naphthyl, anthranyl, phenanthryl, N-pyrrolidonyl, N-imidazolyl,

2-pyridyl, 4-pyridyl or an alkyl-substituted aromatic substituent or

R² = COOR³ where R³ = H or R³ is a linear or branched alkyl radical of C₁-C₁₀

or

R³ is a heteroatom-substituted radical -(CH₂)_nX where X = OH or X = N(R⁴)₂

wherein n = 1-10 and R⁴ is in each case independently H or R⁴ = C₁-C₄-alkyl

or

R^3 is $-(CH_2CH_2O)_mR^5$ wherein $m = 1-90$ and $R^5 = H$ or $R^5 = C_1-C_{18}$ or R^3 is a benzyl, phenyl or cyclohexyl radical

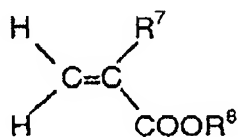
or

$R^2 = CONHR^6$ wherein $R^6 = H$ or R^6 is a linear or branched alkyl radical of C_1-C_{10}

or

R^6 is a heteroatom-substituted radical $-(CH_2)_nX$ where $X = OH$ or $X = N(R^4)_2$ wherein $n = 1-10$ and R^4 is in each case independently H or $R^4 = C_1-C_4$ -alkyl;

Formula B:



wherein $R^7 = H$ or CH_3 , and

R^8 radical = linear or branched alkyl radicals of $C_{12}-C_{40}$, and,

(ii) a customary dewaxing additive.

Claim 12. (Previously Presented) The dewaxing additive according to Claim 11, which is a solution of the copolymer in an oil of the paraffinic or naphthenic type, or in an organic solvent.

Claim 13. (Previously Presented) The dewaxing additive according to Claim 12, wherein the organic solvent is toluene, xylene and/or naphtha.

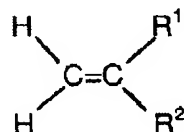
Claim 14. (Previously Presented) A method for solvent deparaffinization of paraffinic mineral oil distillates, comprising:

adding a dewaxing additive to said paraffinic mineral oil distillates, to obtain paraffin crystals; and

separating said paraffin crystals;

wherein said dewaxing additive comprises in polymerized form the following free-radically polymerizable monomers of Formulae A and B:

Formula A:



wherein

$\text{R}^1 = \text{H}$ or CH_3 ,

$\text{R}^2 =$ phenyl, benzyl, naphthyl, anthranyl, phenanthryl, N-pyrrolidonyl, N-imidazolyl,

2-pyridyl, 4-pyridyl or an alkyl-substituted aromatic substituent or

$\text{R}^2 = \text{COOR}^3$ where $\text{R}^3 = \text{H}$ or R^3 is a linear or branched alkyl radical of $\text{C}_1\text{-C}_{10}$

or

R^3 is a heteroatom-substituted radical $-(\text{CH}_2)_n\text{X}$ where $\text{X} = \text{OH}$ or $\text{X} = \text{N}(\text{R}^4)_2$

wherein $n = 1\text{-}10$ and R^4 is in each case independently H or $\text{R}^4 = \text{C}_1\text{-C}_4\text{-alkyl}$

or

R^3 is $-(\text{CH}_2\text{CH}_2\text{O})_m\text{R}^5$ wherein $m = 1\text{-}90$ and $\text{R}^5 = \text{H}$ or $\text{R}^5 = \text{C}_1\text{-C}_{18}$ or R^3 is a benzyl,

phenyl or cyclohexyl radical

or

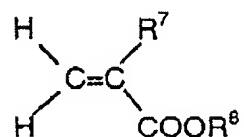
$\text{R}^2 = \text{CONHR}^6$ wherein $\text{R}^6 = \text{H}$ or R^6 is a linear or branched alkyl radical of $\text{C}_1\text{-C}_{10}$

or

R^6 is a heteroatom-substituted radical $-(\text{CH}_2)_n\text{X}$ where $\text{X} = \text{OH}$ or $\text{X} = \text{N}(\text{R}^4)_2$

wherein $n = 1\text{-}10$ and R^4 is in each case independently H or $\text{R}^4 = \text{C}_1\text{-C}_4\text{-alkyl}$;

Formula B:



wherein $\text{R}^7 = \text{H}$ or CH_3 , and

R^8 radical = linear or branched alkyl radicals of C_{12} - C_{40} , and,
optionally further customary dewaxing additives.

Claim 15. (Previously Presented) The method according to Claim 14, wherein the addition rate of the copolymer is 0.005-0.5%.

Claim 16-20. (Cancelled)

Claim 21. (Previously Presented) The dewaxing additive according to Claim 11, comprising:

a copolymer of behenyl acrylate and styrene.

Claim 22. (Previously Presented) The dewaxing additive according to Claim 11, comprising:

a copolymer of behenyl acrylate and at least one member selected from the group consisting of n-butyl methacrylate, isononyl methacrylate, and benzyl methacrylate.

Claim 23. (Previously Presented) The method according to Claim 14, comprising:
cooling said paraffinic mineral oil distillates to below -20°C , thereby crystallizing said paraffin.

Claim 24. (Previously Presented) The method according to Claim 14, comprising:
adding a solvent.

Claim 25. (Previously Presented) The method according to Claim 14, comprising:
adding a solvent to said paraffinic mineral oil distillates, to obtain a solvent-paraffinic mineral oil mixture;
cooling the solvent-paraffinic mineral oil mixture thereby forming paraffin crystals which form a filter cake which is porous and permeable to a solvent-mineral oil mixture; and
separating said paraffin crystals from said solvent-mineral oil mixture by filtration.

Claim 26. (Previously Presented) The method according to Claim 25, wherein said paraffin crystals grow epitaxially.

Claim 27. (Previously Presented) The method according to Claim 14, comprising:
adding said dewaxing additive to said paraffinic mineral oil distillates at a temperature above the cloud point of said mineral oil.

Claim 28. (Previously Presented) The dewaxing additive according to Claim 11,
consisting of:
a copolymer of behenyl acrylate and styrene.

Claim 29. (Previously Presented) The method according to Claim 14, comprising:
adding said dewaxing additive to said paraffinic mineral oil distillates, to obtain paraffin crystals;

Application No.: 10/505,370

Reply to Office Action of: September 14, 2007

separating said paraffin crystals; and

obtaining a deparaffinized mineral oil distillates.

Claim 30. (Previously Presented) The dewaxing additive of Claim 11 which is suitable for solvent deparaffinization of paraffinic mineral oil distillates and which influences the size and shape of paraffin crystals obtained from the paraffinic mineral oil.